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?  e au=foster, timothy
Ref   Items  Index-term
E1       12  AU=FOSTER, TIM J.
E2        1  AU=FOSTER, TIMONTHY J.
E3       17  AU=FOSTER, TIMOTHY
E4        1  AU=FOSTER, TIMOTHY A
E5        1  AU=FOSTER, TIMOTHY D.
E6        1  AU=FOSTER, TIMOTHY DAVID
E7        1  AU=FOSTER, TIMOTHY E
E8       49  AU=FOSTER, TIMOTHY J
E9      124  AU=FOSTER, TIMOTHY J.
E10       2  AU=FOSTER, TIMOTHY JAMES
E11      10  AU=FOSTER, TIMOTHY JOHN
E12      14  AU=FOSTER, TIMOTHY P
E13      17  AU=FOSTER, TIMOTHY P.
E14       2  AU=FOSTER, TIMOTHY PAUL
E15       1  AU=FOSTER, TIMOTHY R.V.
E16       1  AU=FOSTER, TIMOTHY. J.
E17       1  AU=FOSTER, TINA C.
E18      89  AU=FOSTER, TJ
E19      11  AU=FOSTER, TJ*
E20       2  AU=FOSTER, TL
E21      27  AU=FOSTER, TM
E22       2  AU=FOSTER, TM*
E23       1  AU=FOSTER, TOBIAS
E24       1  AU=FOSTER, TODD
E25       1  AU=FOSTER, TODD J.
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?  s e1-e3, e8-e11
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           12   AU=FOSTER, TIM J.
            1   AU=FOSTER, TIMONTHY J.
           17   AU=FOSTER, TIMOTHY
           49   AU=FOSTER, TIMOTHY J
          124   AU=FOSTER, TIMOTHY J.
            2   AU=FOSTER, TIMOTHY JAMES
           10   AU=FOSTER, TIMOTHY JOHN
S1        215   S E1-E3, E8-E11

?  s antiobod$ or serum or immunoglobulin or monoclonal or polyclonal
S2    5844286   S ANTIOBOD$ OR SERUM OR IMMUNOGLOBULIN OR MONOCLONAL OR POLYCLONAL

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?  s antiobod? or serum or immunoglobulin or monoclonal or polyclonal
S3    5844319   S ANTIOBOD? OR SERUM OR IMMUNOGLOBULIN OR MONOCLONAL OR POLYCLONAL

?  s SdrG or Sdr or Fbe
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          134   SDRG
         7772   SDR
         1055   FBE
S4       8909   S SDRG OR SDR OR FBE

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      5844319   S3
         8909   S4
S5        395   S S3 AND S4

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          395   S5
       213349   FIBRINOGEN
S6         52   S S5 AND FIBRINOGEN

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>>>W: Duplicate detection is not supported for File 393.
Records from unsupported files will be retained in the RD set.
S7   22   RD (UNIQUE ITEMS)

? t s7/medium,k/1-22
>>>W: KWIC option is not available in file(s): 399
 7/K/1 (Item 1 from file: 5) Links
   Fulltext available through: USPTO Full Text Retrieval Options
Biosis Previews(R)

0019555755   Biosis No.: 200700215496
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG

Author: Hall Andrea E; Patel Pratiksha R; Domanski Paul J; Prater Bradley D; Gorovits Elena L; Syribeys Peter J; Vernachio John H; Patti Joseph M; Hutchins Jeff T (Reprint)
Author Address: Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA 30004 USA**USA
Author E-mail Address: jhutchins@inhibitex.com
Journal: Hybridoma   26 (1): p 28-34 FEB 2007 2007
ISSN: 1554-0014
Document Type: Article
Record Type: Abstract
Language: English
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG

Abstract: ...stage contributing to the pathogenesis of this bacteria is the initial adherence to host tissue. SdrG is a cell-wall-anchored fibrinogen-binding adhesin of S. epidermidis that has been shown to be necessary for bacterial binding to fibrinogen-coated foreign bodies, such as catheters. Here we report the generation and characterization of a panel of monoclonal antibodies (MAbs) directed against this S. epidermidis virulence factor. Through the use of multiple in... ...that may prove to be beneficial in studies that address the precise biologic role of SdrG.
DESCRIPTORS:
 Chemicals & Biochemicals: fibrinogen; ... ...monoclonal antibody... ...SdrG

>>>W: KWIC option is not available in file(s): 399
 7/K/2 (Item 2 from file: 5) Links
   Fulltext available through: American Society for Microbiology   custom link
USPTO Full Text Retrieval Options
Biosis Previews(R)

18943764   Biosis No.: 200600289159
Human immunoglobulin G recognizing fibrinogen-binding surface proteins is protective against both Staphylococcus aureus and Staphylococcus epidermidis infections in vivo

Author: Vernachio John H (Reprint); Bayer Arnold S; Ames Brenda; Bryant Dawn; Prater Bradley D; Syribeys Peter J; Gorovits Elena L; Patti Joseph M
Author Address: Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA 30004 USA**USA

Author E-mail Address: jvernachio@inhibitex.com
Journal: Antimicrobial Agents and Chemotherapy 50 (2): p 511-518 FEB 2006 2006
ISSN: 0066-4804
Document Type: Article
Record Type: Abstract
Language: English
Human immunoglobulin G recognizing fibrinogen-binding surface proteins is protective against both Staphylococcus aureus and Staphylococcus epidermidis infections in vivo

Abstract: A human donor-selected immunoglobulin G for intravenous injection (IGIV) product with elevated titers against the staphylococcal fibrinogen-binding MSCRAMM proteins ClfA and SdrG (INH-A21) was tested in vitro and in vivo. INH-A21 contained a significantly increased ability to inhibit the fibrinogen-binding activity of recombinant forms of both ClfA and SdrG. Evaluation of the opsonizing potential of INH-A21 was evaluated using fluorescently labeled bacteria; this...
DESCRIPTORS:
Chemicals & Biochemicals: ...immunoglobulin G... ...SdrG; ...
...fibrinogen-binding surface proteins

>>>W: KWIC option is not available in file(s): 399
7/K/3 (Item 3 from file: 5) Links
Fulltext available through: USPTO Full Text Retrieval Options

18192570 Biosis No.: 200500098483
A fibrinogen-binding protein of Staphylococcus lugdunensis

Author: Nilsson Martin; Bjerketorp Joakim; Guss Bengt; Frykberg Lars (Reprint)
Author Address: Dept Microbiol, Swedish Univ Agr Sci, POB 7025, SE-75007, Uppsala, Sweden** Sweden
Author E-mail Address: lars.frykberg@mikrob.slu.se
Journal: FEMS Microbiology Letters 241 (1): p 87-93 December 1, 2004 2004
Medium: print
ISSN: 0378-1097
Document Type: Article
Record Type: Abstract
Language: English
A fibrinogen-binding protein of Staphylococcus lugdunensis

Abstract: A gene called fbl, encoding a Staphylococcus lugdunensis fibrinogen -binding protein, was identified by phage display. The encoded protein, Fbl, is a member of the Sdr-family, a group of staphylococcal cell surface proteins containing a characteristic serine-aspartate repeat region. The fibrinogen-binding domain was mapped to 313 amino acids, and shows, 62% identity to the corresponding region in clumping factor (ClfA) from Staphylococcus aureus. Anti-serum against ClfA cross-reacted with Fbl, and blocked S. lugdunensis adherence to fibrinogen. Twelve clinical isolates of S. lugdunensis analysed by Southern blot all had an fbl-like...

DESCRIPTORS:
Chemicals & Biochemicals: fibrinogen; ... ...fibrinogen-binding protein

>>>W: KWIC option is not available in file(s): 399
7/K/4 (Item 4 from file: 5) Links
Fulltext available through: USPTO Full Text Retrieval Options

18024813 Biosis No.: 200400395602
beta2-integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis

Author: Wu R-C; Wang Z (Reprint); Liu M-J; Chen D-F; Yue X-S
Author Address: Dept Biol Sci and Biotechnol, Tsing Hua Univ, Beijing, 100084, China**China
Author E-mail Address: zwang@tsinghua.edu.cn
Journal: CMLS Cellular and Molecular Life Sciences 61 (16): p 2071-2082 August 2004 2004
Medium: print
ISSN: 1420-682X
Document Type: Article
Record Type: Abstract
Language: English

Abstract: ...leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, Western blott and DNA Ladder. CHXhigh (10-100 mug/ml ... ...inhibited by short-term preincubation with CHXlow (2.5 mug/ml). Unlike typical multidrug resistance, SDR is not caused by reduced drug accumulation or altered protein expression, and may be associated... ...adhesion has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that beta2-integrin engagement is a key mediator of SDR, although it may be non-exclusive. This finding supplements the classical basis of chemoresistance and...
DESCRIPTORS:
Chemicals & Biochemicals: ...anti-CD18 monoclonal antibody...
Miscellaneous Terms: Concept Codes: sudden drug resistance {SDR}

>>>W: KWIC option is not available in file(s): 399
7/K/5 (Item 5 from file: 5) Links
Fulltext available through: USPTO Full Text Retrieval Options
Biosis Previews(R)

17564571 Biosis No.: 200300519934
Methicillin-resistant Staphylococcus aureus isolates carrying pls invade host cells less efficiently than pls-negative MRSA isolates.

Author: Sinha B (Reprint); Juuti K; Werbick C (Reprint); Kuusela P; Peters G (Reprint)
Author Address: Institute of Medical Microbiology, University Hospital of Muenster, Muenster, Germany**Germany
Journal: Abstracts of the General Meeting of the American Society for Microbiology 103 p B-207 2003 2003
Medium: cd-rom
Conference/Meeting: 103rd American Society for Microbiology General Meeting Washington, DC, USA May 18-22, 2003; 20030518
Sponsor: American Society for Microbiology
ISSN: 1060-2011 _(ISSN print)
Document Type: Meeting; Meeting Abstract
Record Type: Abstract
Language: English

Abstract: ...MSSA isolates. Pls (plasmin-sensitive) is a cell wall-anchored surface protein, belonging to the Sdr family of adhesins. Since adherence of pls-positive MRSA isolates to immobilized IgG, fibrinogen and Fn is reduced, we tested, whether this is also true for cellular invasiveness. Methods...
DESCRIPTORS:
Chemicals & Biochemicals: IgG {immunoglobulin G...

>>>W: KWIC option is not available in file(s): 399

 7/K/6 (Item 6 from file: 5) Links
Biosis Previews(R)

17309113   Biosis No.: 200300277832
MSCRAMM(R) protein mAb protects against S. epidermidis central venous catheter induced infection.

Author: Vernachio J (Reprint); Bryant D (Reprint); Hall A (Reprint); Patel P (Reprint); Domanski P (Reprint); Syribeys P (Reprint); Gorovits E (Reprint) ; Wang J (Reprint); Robbins J (Reprint); Hutchins J (Reprint); Patti J (Reprint)
Author Address: Inhibitex, Inc., Alpharetta, GA, USA**USA
Journal: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy   42 p 32 2002 2002
Medium: print
Conference/Meeting: American Society for Microbiology (ASM) Annual Meeting on Infectious Disaease   San Diego, CA, USA   September 27-30, 2002; 20020927
Sponsor: American Society for Microbiology
Document Type: Meeting; Meeting Abstract
Record Type: Abstract
Language: English

Abstract: ...both a reduction in the incidence and severity of disease. We have demonstrated that a monoclonal antibody (mAb) against the MSCRAMM(R) protein, SdrG, inhibits the binding to human fibrinogen in vitro and also provides significant protection against methicillin resistant S. epidermidis (MRSE) challenge in... ...infection model. Methods: Clinical efficacy was evaluated in a rat model of CVC-associated infection. SdrG mAb 59-59 (n=10) and a control mAb (n=13) were administered IV. 24... ...were infected (13/13). Conclusions: These data clearly demonstrate that a single infusion with a SdrG mAb can significantly prevent catheter associated MRSE bacteremia and subsequent hematogenous dissemination to target organs.
DESCRIPTORS:
 Chemicals & Biochemicals: ...monoclonal antibodies... ...MSCRAMM protein monoclonal antibody

>>>W: KWIC option is not available in file(s): 399
 7/K/7 (Item 7 from file: 5) Links
Biosis Previews(R)

16972468   Biosis No.: 200200565979
Prevention of experimental Staphylococcus epidermidis (SE) endocarditis (IE) by passive immunotherapy with INH-A00021, a human IgG directed against staphylococcal fibrinogen-binding proteins

Author: Kupferwasser L I (Reprint); Prater B; Wang J; Ruckstuhl M J; Lee K; Gast D; Adams D; Patti J M; Bayer A S (Reprint)
Author Address: Harbor-UCLA Res. and Ed. Inst., Torrance, CA, USA**USA
Journal: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy   41 p 278 2001 2001
Medium: print
Conference/Meeting: 41st Annual Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy   Chicago, Illinois, USA   September 22-25, 2001; 20010922
Document Type: Article; Meeting
Record Type: Abstract
Language: English
...SE) endocarditis (IE) by passive immunotherapy with INH-A00021, a human IgG directed against staphylococcal fibrinogen-binding proteins

Abstract: Background: SE is a major cause of endovascular infections, utilizing adhesins such as the fibrinogen-binding adhesin, SdrG, to bind to sites of endovascular damage. Purpose: INH-A00021 is a donor-selected, plasma-derived

hyperimmune globulin containing elevated levels of IgG against the staphylococcal fibrinogen-binding proteins, SdrG, and ClfA. This study evaluated the efficacy of INH-A00021 in attenuating experimental SE IE... ...p=0.0006). Also, the extent of bacteremia was significantly lower in animals receiving anti-SdrG, when compared to controls (p<0.01). Results of quantitative tissue cultures (mean log10CFU/g...
DESCRIPTORS:
Chemicals & Biochemicals: ...IgG {immunoglobulin G... ...SdrG--...
...fibrinogen-binding adhesion... ...staphylococcal fibrinogen-binding proteins

>>>W: KWIC option is not available in file(s): 399
7/K/8 (Item 8 from file: 5) Links
Fulltext available through: USPTO Full Text Retrieval Options
Biosis Previews(R)

15411492 Biosis No.: 200000129805
A bone sialoprotein-binding protein from Staphylococcus aureus: A member of the staphylococcal Sdr family

Author: Tung Hui-shan; Guss Bengt; Hellman Ulf; Persson Lena; Rubin Kristofer; Ryden Cecilia (Reprint)
Author Address: Department of Medical Biochemistry and Microbiology, Uppsala University, BMC, SE-751 23, Uppsala, Sweden**Sweden
Journal: Biochemical Journal 345 (3): p 611-619 Feb. 1, 2000 2000
Medium: print
ISSN: 0264-6021
Document Type: Article
Record Type: Abstract
Language: English
A bone sialoprotein-binding protein from Staphylococcus aureus: A member of the staphylococcal Sdr family

Abstract: ...acids, called BSP-binding protein (Bbp), which displays similarity to recently described proteins of the Sdr family from S. aureus. SdrC, SdrD and SdrE encode putative cell-surface proteins with no described ligand specificity. Bbp also shows similarity to a fibrinogen -binding protein from S. epidermidis called Fbe. A serine-aspartic acid repeat sequence was found close to the cell-wall-anchoring Leu... ...protein bound radiolabelled native BSP, and inhibited the binding of radiolabelled BSP to staphylococcal cells. Serum from patients suffering from bone and joint infection contained antibodies that reacted with the fusion...
DESCRIPTORS:
Chemicals & Biochemicals: Sdr;

>>>W: KWIC option is not available in file(s): 399
7/K/9 (Item 1 from file: 34) Links
Fulltext available through: American Society for Microbiology custom link
USPTO Full Text Retrieval Options
SciSearch(R) Cited Ref Sci

09577298 Genuine Article#: 423CT No. References: 51
Expression of pls, a gene closely associated with the mecA gene of methicillin-resistant Staphylococcus aureus, prevents bacterial adhesion in vitro

Author: Savolainen K (REPRINT) ; Paulin L; Westerlund-Wikstrom B; Foster TJ; Korhonen TK; Kuusela P
Corporate Source: Univ Helsinki,Div Gen Microbiol, Dept Biosci,POB 56/FIN-00014 Helsinki//Finland/ (REPRINT); Univ Helsinki,Div Gen Microbiol, Dept Biosci,FIN-00014 Helsinki//Finland/; Univ Helsinki,Inst Biotechnol,FIN-00014 Helsinki//Finland/; Univ Helsinki,Haartman Inst, Dept Bacteriol & Immunol,FIN-00014 Helsinki//Finland/; Univ Helsinki,Cent Hosp, HUCH Lab Diagnost, Div Clin Microbiol,Helsinki//Finland/; Univ Dublin Trinity Coll,Moyne Inst Prevent Med, Dept Microbiol,Dublin 2//Ireland/
Journal: INFECTION AND IMMUNITY , 2001 , V 69 , N5 (MAY) , P 3013-3020

ISSN: 0019-9567 Publication date: 20010500
Publisher: AMER SOC MICROBIOLOGY , 1752 N ST NW, WASHINGTON, DC 20036-2904 USA
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)
Abstract: ...distinct repeat regions, one of which was a serine-aspartate repeat characteristic of the Clf-Sdr family of surface proteins in staphylococci, The lengths of the repeat regions varied in different... ...digested DNA. A pls mutant constructed by allele replacement adhered well to immobilized fibronectin and immunoglobulin e, in contrast to the parental strain, suggesting that Pls could have a role in...
Identifiers-- ...FIBRINOGEN-BINDING PROTEIN; NUCLEOTIDE-SEQUENCE; CLUMPING FACTOR; INSERTIONAL INACTIVATION; ESCHERICHIA-COLI; REPEAT REGION; FIBRONECTIN; CLONING; DNA

>>>W: KWIC option is not available in file(s): 399
 7/K/10 (Item 2 from file: 34) Links
   Fulltext available through: USPTO Full Text Retrieval Options
SciSearch(R) Cited Ref Sci

02147492 Genuine Article#: KE378 No. References: 43
INHIBITION OF PLATELET-ADHESION TO FIBRIN(OGEN) IN FLOWING WHOLE-BLOOD BY ARG-GLY-ASP AND FIBRINOGEN GAMMA-CHAIN CARBOXY TERMINAL PEPTIDES

Author: HANTGAN RR; ENDENBURG SC; CAVERO I; MARGUERIE G; UZAN A; SIXMA JJ; DEGROOT PG
Corporate Source: WAKE FOREST UNIV,BOWMAN GRAY SCH MED,DEPT BIOCHEM,MED CTR BLVD/WINSTON SALEM//NC/27157; UNIV UTRECHT,DEPT HEMATOL/UTRECHT//NETHERLANDS/; RHONE POULENC RORER RD/VITRY//FRANCE/; INSERM,U127,HEMATOL LAB/GRENOBLE//FRANCE/
Journal: THROMBOSIS AND HAEMOSTASIS , 1992 , V 68 , N6 (DEC 7) , P 694-700
ISSN: 0340-6245
Language: ENGLISH Document Type: ARTICLE (Abstract Available)
...OF PLATELET-ADHESION TO FIBRIN(OGEN) IN FLOWING WHOLE-BLOOD BY ARG-GLY-ASP AND FIBRINOGEN GAMMA-CHAIN CARBOXY TERMINAL PEPTIDES
Abstract: We have employed synthetic peptides with sequences corresponding to the integrin receptor-recognition regions of fibrinogen as inhibitors of platelet aggregation and adhesion to fibrinogen and fibrin-coated surfaces in flowing whole blood, using a rectangular perfusion chamber at wall... ...1,300 s-1. D-RGDW caused substantial inhibition of platelet aggregation and adhesion to fibrinogen and fibrin at both shear rates, although it was least effective at blocking platelet adhesion... ...300 s-1. RGDS was a weaker inhibitor, and produced a biphasic dose-response curve; SDRG was inactive. HHLGGAKQAGDV partially inhibited platelet aggregation and adhesion to fibrin(ogen) at both shear ...
Identifiers-- ...GLYCOPROTEIN-IIB-IIIA; VONWILLEBRAND-FACTOR; MONOCLONAL -ANTIBODIES; ARTIFICIAL SURFACES; BINDING; RECEPTOR; SUBENDOTHELIUM; COMPLEX; CELLS; FIBRONECTIN
Research Fronts: 91-2339 004 (PLATELET GLYCOPROTEIN-IIB-IIIA COMPLEX; FIBRINOGEN RECEPTOR ANTAGONIST; ANTIPLATELET ARG-GLY-ASP-CONTAINING PEPTIDE; SNAKE-VENOM PROTEIN ECHISTATIN)
 91-5876 001...

>>>W: KWIC option is not available in file(s): 399
 7/K/11 (Item 1 from file: 50) Links
   Fulltext available through: USPTO Full Text Retrieval Options
CAB Abstracts

0008126189 CAB Accession Number: 20013167686
Fibrinogen - and von Willebrand factor-binding proteins in staphylococci.

Nilsson, M.
Department of Microbiology, Swedish University of Agricultural Sciences, Box 7025, S-750 07 Uppsala, Sweden.
Acta Universitatis Agriculturae Sueciae - Agraria (265): p.115
Publication Year: 2001

ISSN: 1401-6249
Publisher: Sveriges Lantbruksuniversitet (Swedish University of Agricultural Sciences) Uppsala , Sweden
ISBN: 91-576-5791-2
Language: English Record Type: Abstract
Document Type: Thesis
Fibrinogen - and von Willebrand factor-binding proteins in staphylococci.
... genes, isolated from coagulase-negative staphylococci (CoNS) associated with human infections, and their corresponding proteins. Fbe and Fbl are the main fibrinogen (Fg)-binding proteins of Staphylococcus epidermidis and S. lugdunensis , respectively. Both proteins are members of the Sdr (SD-repeat containing protein) family, a subgroup of cell surface proteins in staphylococci with a... ... less perfect, tandemly repeated serine and aspartate residues. Sequence comparisons in the binding regions between Fbe and Fbl revealed low mutual similarity. However, Fbl is relatively conserved (63% identity) in the binding region compared to clumping factor A (ClfA), the prototype Sdr protein from S. aureus . The third gene, vWbl , encodes a putative von Willebrand factor (vWf... ... an overall organization, that is characteristic for cell surface proteins in staphylococci. The importance of Fbe, Fbl and vWbl for their respective organisms during the infection process is not known, but ... ... to extracellular matrix or plasma-coated biomaterials. Separate recombinant constructs, comprising the binding regions of Fbe and Fbl or separate antibodies directed against the binding regions of the proteins, were able... ... the adherence of S. epidermidis and S. lugdunensis , respectively, to immobilized Fg. The presence of fbe, fbl and vwbl genes is very common in clinical isolates of the respective species. In... ... these experiments, vWbp immobilized on a Sepharose-column was used to purify vWf from human serum. The gene vWb was present in all tested strains of S. aureus .

Descriptors: ...fibrinogen;

02747070 2004224218
betaSUB2-integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis

Wu R.-C.; Wang Z.; Liu M.-J.; Chen D.-F.; Yue X.-S.
Address: Z. Wang, Dept. of Biol. Sci. and Biotech., Tsinghua University, Beijing , China
Email: zwang@tsinghua.edu.cn
Journal : Cellular and Molecular Life Sciences , 61/16 (2071-2082) , 2004 , Switzerland
CODEN: CMLSF
ISSN: 1420-682X
Document Type: Article
Languages: English Summary Languages: English
No. of References: 48

DESCRIPTORS:
Apoptosis; Cycloheximide; U937 cell; betaSUB2-integrin; Drug resistance; PI-3K

CLASSIFICATION CODE AND DESCRIPTION:
Modlecular Sequence Databank Number: 87.2.1.5 - CANCER RESEARCH / TUMOUR BIOLOGY / Cellular Biology and Biochemistry / Immortalisation, senescence and apoptosis
87.4.1.15 - CANCER RESEARCH / TREATMENT / Chemotherapy / Resistance
87.4.11 - CANCER RESEARCH / TREATMENT / Treatment Monitoring and Evaluation

...leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, Western blott and

DNA Ladder. CHXSUPhigh (10-100 mug/ml... ...inhibited by short-term preincubation with CHXSUBlow (2.5 mug/ml). Unlike typical multidrug resistance, SDR is not caused by reduced drug accumulation or altered protein expression, and may be associated... ...has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD 18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that betaSUB2-integrin engagement is a key mediator of SDR, although it may be non-exclusive. This finding supplements the classical basis of chemoresistance and...

>>>W: KWIC option is not available in file(s): 399
7/K/13 (Item 1 from file: 155) Links
Fulltext available through: USPTO Full Text Retrieval Options
MEDLINE(R)

15223135 PMID: 15583173
Protein FOG--a streptococcal inhibitor of neutrophil function.

Johansson Helena M; Morgelin Matthias; Frick Inga-Maria
Department of Cell and Molecular Biology, Section for Clinical and Experimental Infectious Medicine, BMC, B14, Lund University, S-221 84 Lund, Sweden.
Microbiology (Reading, England) (England) Dec 2004 , 150 (Pt 12) p4211-21 ,
ISSN: 1350-0872--Print Journal Code: 9430468
Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
...of group G streptococci (GGS) form aggregates when grown in vitro. Aggregating strains interact with fibrinogen, and this study reports the isolation of a novel self-associating and fibrinogen-binding protein of GGS, denoted protein FOG. Sequencing of the fog gene revealed structural similarity... ...of GGS express protein G, a protein known to interact with the constant region of immunoglobulin G and albumin. Surprisingly, a clinical isolate expressing protein G, but lacking protein FOG, was... ...negative strain from being killed. The antibactericidal property of protein FOG is dependent on its fibrinogen-binding activity. Thus, in plasma, FOG precipitates fibrinogen, and when added to whole blood, protein FOG triggers the formation of visible aggregates comprising fibrinogen and neutrophils that are disabled in their killing of the bacteria. Moreover, the results emphasize...
Descriptors: *Bacterial Proteins--metabolism--ME; *Blood--microbiology--MI; *Carrier Proteins--metabolism--ME; *Fibrinogen--metabolism--ME; *Neutrophils --immunology--IM; *Streptococcus--growth and development--GD
Chemical Name: Bacterial Proteins; Carrier Proteins; Fbe protein, bacteria; Fibrinogen

>>>W: KWIC option is not available in file(s): 399
7/K/14 (Item 1 from file: 393) Links
Beilstein Database - Abstracts

Beilstein Abstract Id: 6577659
Title: Human Immunoglobulin G Recognizing Fibrinogen-Binding Surface Proteins Is Protective against both Staphylococcus aureus and Staphylococcus epidermidis Infections In Vivo
Document Type: Journal Record Type: Abstract
Author: Vernachio, John H.; Bayer, Arnold S.; Ames, Brenda; Bryant, Dawn; Prater, Bradley D.; Syribeys, Peter J.; Gorovits, Elena L.; Patti, Joseph M.
Citation: Antimicrob. Agents & Chemother. (2006) Series: 50-2, 511 - 518 CODEN: AMACCQ Language: English

Abstract Language: English
Title: Human Immunoglobulin G Recognizing Fibrinogen-Binding Surface Proteins Is Protective against both Staphylococcus aureus and Staphylococcus epidermidis Infections In Vivo
Abstract: A human donor-selected immunoglobulin G for intravenous injection (IGIV) product with elevated titers against the staphylococcal fibrinogen-binding MSCRAMM proteins ClfA and SdrG (INH-A21) was tested in vitro and in vivo. INH-A21 contained a significantly increased ability to inhibit the fibrinogen-binding activity of recombinant forms of both ClfA and SdrG. Evaluation of the opsonizing potential of INH-A21 was evaluated using fluorescently labeled bacteria; this...

>>>W: KWIC option is not available in file(s): 399
7/K/15 (Item 2 from file: 393) Links
Beilstein Database - Abstracts

Beilstein Abstract Id: 6471865
Title: beta 2 -integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis
Document Type: Journal Record Type: Abstract
Author: Wu, R.-C.; Wang, Z.; Liu, M.-J.; Chen, D.-F.; Yue, X.-S.
Citation: Cell. Mol. Life Sci (2004) Series: 61-16, 2071 - 2082 CODEN: CMLSFI
Language: English
Abstract Language: English
Keywords: apoptosis; cycloheximide; U937 cell; Beta 2 -integrin; drug resistance; PI-3K
Abstract: ... leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, Western blott and DNA Ladder. CHX high (10-100 mu... ... short-term preincubation with CHX low (2.5 mu g/ml). Unlike typical multidrug resistance, SDR is not caused by reduced drug accumulation or altered protein expression, and may be associated... ... adhesion has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that beta 2 -integrin engagement is a key mediator of SDR, although it may be non-exclusive. This finding supplements the classical basis of chemoresistance and...

>>>W: KWIC option is not available in file(s): 399
7/K/16 (Item 1 from file: 399) Links
CA SEARCH(R)

144348882 CA: 144(19)348882p PATENT
Immunogenic composition comprising a mixture of staphylococcal antigens and uses as vaccines
Inventor (Author): Castado, Cindy; Lecrenier, Nicolas Pierre Fernand; Neyt, Cecile Anne; Poolman, Jan
Location: Belg.
Assignee: GlaxoSmithKline Biologicals S.A.
Patent: PCT International ; WO 200632472 A2 Date: 20060330
Application: WO 2005EP10184 (20050920) *GB 200421082 (20040922) *GB 200421078 (20040922) *GB 200421081 (20040922) *GB 200421079 (20040922) *GB 20053143 (20050215)

Pages: 132 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
Class: A61K-000/A
Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR;

HU; ID; IL; IN; IS; JP; KE; KG; KM; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; LY; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SM; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM
Designated Regional: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LT; LU; LV; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

>>>W: KWIC option is not available in file(s): 399
7/K/17 (Item 2 from file: 399) Links
CA SEARCH(R)

141348821 CA: 141(21)348821f PATENT
Staphylococcus epidermidis-derived hyperimmune serum reactive antigens and encoding nucleic acids for diagnosis and treatment of bacterial infection and for antagonist screening
Inventor (Author): Meinke, Andreas; Min, Bui Duc; Nagy, Eszter
Location: Austria
Assignee: Intercell AG
Patent: PCT International ; WO 200487746 A2 Date: 20041014
Application: WO 2004EP3398 (20040331) *EP 2003450078 (20030331)
Pages: 196 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
Class: C07K-014/00A
Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW
Designated Regional: BW; GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

>>>W: KWIC option is not available in file(s): 399
7/K/18 (Item 3 from file: 399) Links
CA SEARCH(R)

139259972 CA: 139(17)259972x PATENT
Monoclonal and polyclonal antibodies recognizing coagulase-negative staphylococcal proteins
Inventor (Author): Patti, Joseph M.; Hutchins, Jeff T.; Hall, Andrea; Domanski, Paul; Patel, Pratisksha; Hook, Magnus; Robbins, Jeff; Vernachio, John; Bowden, Maria G.
Location: USA
Assignee: Inhibitex, Inc.; The Texas A & M University System
Patent: PCT International ; WO 200376470 A1 Date: 20030918
Application: WO 2003US6415 (20030305) *US PV361324 (20020305)
Pages: 72 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
Class: C07K-016/00A; C07K-001/00B; C07K-002/00B; C07H-021/04B; A61K-039/395B; A61K-039/40B; A61K-039/00B; A61K-039/09B; A61K-039/085B
Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN;

MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
Designated Regional: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

>>>W: KWIC option is not available in file(s): 399
7/K/19 (Item 1 from file: 357) Links
Fulltext available through: USPTO Full Text Retrieval Options
Derwent Biotech Res.

0420861 DBA Accession No.: 2007-06799
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG hybridoma cell culture for recombinant monoclonal antibody production

Author: HALL AE; PATEL PR; DOMANSKI PJ; PRATER BD; GOROVITS EL; SYRIBEYS PJ; VERNACHIO JH; PATTI JM; HUTCHINS JT
Corporate Affiliate: Inhibitex Inc
Corporate Source: Hutchins JT, Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA 30004 USA
Journal: HYBRIDOMA (26, 1, 28-34) 2007
ISSN: 1554-0014
Language: English
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG hybridoma cell culture for recombinant monoclonal antibody production
Abstract: ...stage contributing to the pathogenesis of this bacteria is the initial adherence to host tissue. SdrG is a cell-wall-anchored fibrinogen-binding adhesin of S. epidermidis that has been shown to be necessary for bacterial binding to fibrinogen-coated foreign bodies, such as catheters. Here we report the generation and characterization of a panel of monoclonal antibodies (MAbs) directed against this S. epidermidis virulence factor. Through the use of multiple in... ...that may prove to be beneficial in studies that address the precise biologic role of SdrG. (7 pages)
Descriptors: Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG -specific recombinant monoclonal antibody prep., purification, characterization, plasmid-mediated gene transfer, expression in Lactococcus lactis, hybridoma, mouse immunization...

>>>W: KWIC option is not available in file(s): 399
7/K/20 (Item 2 from file: 357) Links
Fulltext available through: USPTO Full Text Retrieval Options
Derwent Biotech Res.

0358809 DBA Accession No.: 2005-04513
A fibrinogen-binding protein of Staphylococcus lugdunensis identification and production of a recombinant fibrinogen binding protein from Staphylococcus lugdunensis using phage display and recombinant technology

Author: NILSSON M; BJERKETORP J; GUSS B; FRYKBERG L
Corporate Affiliate: Swedish Univ Agr Sci
Corporate Source: Frykberg L, Swedish Univ Agr Sci, Dept Microbiol, POB 7025, SE-75007 Uppsala, Sweden
Journal: FEMS MICROBIOLOGY LETTERS (241, 1, 87-93) 2004
ISSN: 0378-1097
Language: English
A fibrinogen-binding protein of Staphylococcus lugdunensis identification and production of a recombinant fibrinogen binding protein from Staphylococcus lugdunensis using phage display and recombinant technology
Abstract: AUTHOR ABSTRACT - A gene called fbl, encoding a Staphylococcus lugdunensis

fibrinogen-binding protein, was identified by phage display. The encoded protein, Fbl, is a member of the Sdr-family, a group of staphylococcal cell surface proteins containing a characteristic serine-aspartate repeat region. The fibrinogen-binding domain was mapped to 313 amino acids, and shows, 62% identity to the corresponding region in clumping factor (ClfA) from Staphylococcus aureus. Anti- serum against ClfA cross-reacted with Fbl, and blocked S. lugdunensis adherence to fibrinogen. Twelve clinical isolates of S. lugdunensis analysed by Southern blot all had an fbl-like...
Descriptors: Staphylococcus lugdunensis, recombinant fibrinogen binding protein, prep, isol., characterization, phage display, fbl gene identification, Southern blot bacterium surface display...

>>>W: KWIC option is not available in file(s): 399
7/K/21 (Item 3 from file: 357) Links
Derwent Biotech Res.

0324377 DBA Accession No.: 2003-25518 PATENT
New antibody recognizing a Staphylococcus epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection chimeric antibody, humanized antibody, monoclonal antibody and single chain antibody production for vaccine, gene therapy and therapy

Author: PATTI J M; HUTCHINS J T; HALL A; DOMANSKI P; PATEL P; HOOK M; ROBBINS J; VERNACHIO J; BOWDEN M G
Patent Assignee: INHIBITEX INC; UNIV TEXAS A and M SYSTEM 2003
Patent Number: WO 200376470 Patent Date: 20030918 WPI Accession No.: 2003-722324 (200368)
Priority Application Number: US 361324 Application Date: 20020305
National Application Number: WO 2003US6415 Application Date: 20030305
Language: English
New antibody recognizing a Staphylococcus epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection chimeric antibody, humanized antibody, monoclonal antibody and single chain antibody production for vaccine, gene therapy and therapy
Abstract: DERWENT ABSTRACT: NOVELTY - An isolated antibody (I) that recognizes a protein from Staphylococcus epidermidis comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2, is new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) isolated... ...treating or preventing a coagulase-negative Staphylococcal infection; (7) an isolated S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2; (8) eliciting an immunogenic reaction in a human or animal; (9) a... ...epidermidis protein; and (10) an isolated nucleic acid sequence encoding an S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2. BIOTECHNOLOGY - Preferred Antibody: The antibody (I) is selected from chimeric, murine, humanized or human monoclonal antibodies. (I) is a single chain monoclonal antibody. (I) binds to the S. epidermidis SdrG protein. (I) recognizes an amino acid sequence selected from the fully defined sequence comprising 560... ...or 951 (S6) base pairs, respectively, as given in the specification. (II) and (III) are monoclonal antibodies. Preferred Kit: The kit comprises means for detecting binding by the antibody, which comprises a detectable label linked to the antibody. Preferred Protein: The isolated S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 comprises an amino acid sequence selected from S1-S3 encoded by a ... ...Staphylococcal infection in a human or an animal and inhibits binding of Staphylococcal bacteria to fibrinogen, useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection. The monoclonal antibodies (II) and (III) comprising 1092 amino acids and 549 amino acids, respectively are also... ...for treating or preventing a coagulase-negative Staphylococcal infection. An isolated S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 is administered to a human or animal to elicit an immune reaction...
Descriptors: Staphylococcus sp. epidermis-specific chimeric antibody, humanized

antibody, monoclonal antibody, single chain antibody prep., appl. vaccine, gene therapy, therapy antibody engineering antibody engineering protein...

>>>W: KWIC option is not available in file(s): 399
7/K/22 (Item 1 from file: 149) Links
TGG Health&Wellness DB(SM)

01988263 Supplier Number: 73924880 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Whole genome sequencing of meticillin-resistant Staphylococcus aureus.

Kuroda, Makoto; Ohta, Toshiko; Uchiyama, Ikuo; Baba, Tadashi; Yuzawa, Harumi; Kobayashi, Ichizo; Cui, Longzhu; Oguchi, Akio; Aoki, Ken-ichi; Nagai, Yoshimi; Lian, JianQi; Ito, Teruyo; Kanamori, Mutsumi; Matsumaru, Hiroyuki; Maruyama, Atsushi; Murakami, Hiroyuki; Hosoyama, Akira; Mizutani-Ui, Yoko; Takahashi, Noriko K; Sawano, Toshihiko; Inoue, Ryu-ichi; Kaito, Chikara; Sekimizu, Kazuhisa; Hirakawa, Hideki; Kuhara, Satoru; Goto, Susumu; Yabuzaki, Junko; Kanehisa, Minoru; Yamashita, Atsushi; Oshima, Kenshiro; Furuya, Keiko; Yoshino, Chie; Shiba, Tadayoshi; Hattori, Masahira ; Ogasawara, Naotake; Hayashi, Hideo; Hiramatsu, Keiichi
The Lancet , 357 , 9264 , 1225
April 21 ,
2001
Publication Format: Magazine/Journal; Refereed
ISSN: 0099-5355
Language: English
Record Type: Fulltext; Abstract Target Audience: Professional
Word Count: 10338 Line Count: 01076

Descriptors: Staphylococcus aureus--Genetic aspects; Genetic recombination--Physiological aspects; Drug resistance--Genetic aspects
File Segment: HI File 149

...wall sorting signal in N315 and Mu50 genomes (table 4). These include seven known adhesins: fibrinogen-binding proteins ClfA, ClfB, and SdrC-D-E, and fibronectin-binding proteins FnbA and FnbB...

...to form clusters at several loci in the genome rather than being randomly distributed. The fibrinogen-binding proteins are characteristic in their possession of serine-aspartate repeats that precede the LPXTG...

...similar to Streptococcus pyogenes myosin-reactive protein,(30) which is known to react with the serum of patients with acute rheumatic fever. The other three open reading frames (SA1751, SA0841, and...Ryden C. A bone sialoprotein-binding protein from Staphylococcus aureus: a member of the staphylococcal Sdr family. Biochem J 2000; 345: 611-19.
(28) Schneewind O, Model P, Fischetti VA. Sorting...

haemolysin	SAS065
Probable haemolysin	SA1973
g-haemolysin components	SA2207, 2208, 2209
Adhesins	
Ser-Asp rich fibrinogen-binding proteins	SA0742, 2423, 0519, 0520, 0521
Probable adhesin	SA0587
Possible extracellular matrix binding proteins	SA0744, 0745
Possible fibrinogen-binding proteins	SA1000, 1003, 1004
Probable extracellular matrix binding proteins	SA1267, 1268

Elastin-binding protein...

...adhesion proteins SA2459, 2460, 2461, 2462

Others
Myosin-crossreactive MHC class II-like protein SA0102
Immunoglobulin G binding protein A SA0107
Possible siderophore biosynthesis proteins SA0116, 0117
Probable capsular polysaccharide SA0126...

d-haemolysin hld
Probable haemolysin
g-haemolysin components hlgA, hlgC, hlgB

Adhesins
Ser-Asp rich fibrinogen-binding proteins clfA, clfB sdrC, sdrD, sdrE
Probable adhesin
Possible extracellular matrix binding proteins
Possible fibrinogen-binding proteins
Probable extracellular matrix binding proteins ebhA, ebhB
Elastin-binding protein ebpS
Fibronectin-binding...

...Intercellular adhesion proteins icaA, icaD, icaB, icaC

Others
Myosin-crossreactive MHC class II-like protein
Immunoglobulin G binding protein A spa
Possible siderophore biosynthesis proteins
Probable capsular polysaccharide synthesis proteins
Capsular...

...toxin 1 SaPIn1/SaPIml
d-haemolysin
Probable haemolysin
g-haemolysin components

Adhesins
Ser-Asp rich fibrinogen-binding proteins
Probable adhesin
Possible extracellular matrix binding proteins
Possible fibrinogen-binding proteins
Probable extracellular matrix binding proteins
Elastin-binding protein
Fibronectin-binding proteins
Intercellular adhesion proteins

Others
Myosin-crossreactive MHC class II-like protein
Immunoglobulin G binding protein A
Possible siderophore biosynthesis proteins
Probable capsular polysaccharide synthesis proteins
Capsular polysaccharide...

...cells

Probable haemolysin	Unknown
g-haemolysin components	Destruction of blood cells
Adhesins	
Ser-Asp rich fibrinogen -binding proteins	Cellular adhesion onto host tissues
Probable adhesin	Cellular adhesion onto host tissues
Possible extracellular matrix binding proteins	Cellular adhesion onto host tissues
Possible fibrinogen-binding proteins	Unknown
Probable extracellular matrix binding proteins	Unknown
Elastin-binding protein	Cellular adhesion onto...

...infected tissues

Others	
Myosin-crossreactive MHC class II-like protein	Potential immune disorder in host
Immunoglobulin G binding protein A	Potential immune disorder in host
Possible siderophore biosynthesis proteins...	Iron uptake